

filler ranging by weight between a nonzero percentage proximate 0% and approximately 40%, wherein the non-woven fibres and the resin are found in specific proportions with the filler.

2. A friction material according to Claim 1, wherein the average length of the fibres is at most 120 mm.
3. A friction material according to Claim 2, wherein the fibres are chosen from the group consisting of glass, wool, cotton, ceramic, polyacrylonitrile, preoxidized polyacrylonitrile and aramid.
4. A friction material according to Claim 3, wherein the filler is in powder form and incorporated into the mat.
5. A friction material according to Claim 4, wherein the filler is selected from the group consisting of copper, rockwool, carbon, zirconium silicate, iron sulphide, alumina, rubber and diatoms.
6. A friction material according to Claim 4, wherein the filler is in the form of pulps and incorporated into the mat.
7. A friction material according to Claim 6, wherein the filler is selected from the group consisting of the pulps of glass, aramid, acrylic and phenolic fibres.
9. A friction material according to Claim 1, wherein the thermosetting resin is resol-based.
10. A friction material according to Claim 1, wherein latex is added to the thermosetting resin.
11. A friction material according to Claim 1, wherein the filler is in powder form and incorporated into the thermosetting resin, and wherein the filler is selected from the group

consisting of copper, rockwool, carbon, zirconium silicate, iron sulphide, alumina, rubber and diatoms.

25. A friction material according to Claim 5, wherein the filler is in form of pulps and incorporated into the mat.

28. A friction material according to Claim 1, wherein the thermosetting resin includes a polar solvent, the polar solvent being an aqueous polar solvent.

33. (Two Times Amended) A friction material for a device employing friction in a liquid medium, the friction material comprising a mat of non-woven fibres impregnated with a thermosetting resin, wherein the friction material comprises by weight

approximately 20% to 40% fibres selected from the group consisting of glass, wool, cotton, ceramic, polyacrylonitrile, preoxidized polyacrylonitrile and aramid;

approximately 40% to 60% thermosetting resin selected from the group consisting of water-based resins, resol-based resins, phenolic plastic resins, aminoaldehyde resins, epoxy resins and polyimide resins; and

a nonzero percentage proximate 0% to approximately 40% filler, wherein the fibres and the thermosetting resin are found in specific proportions with the filler.

34. The friction material according to Claim 33 wherein the fibres have an average length of between approximately 12 mm and 120 mm.

35. The friction material according to Claim 33 that is by weight approximately 20% glass fibres, 10% ceramic fibres, 10% polyacrylonitrile fibres, and 60% water-based resin.

36. The friction material according to Claim 33 that is by weight approximately 30% cotton fibres, 10% ceramic fibres, and 60% water-based resin.

37. The friction material according to Claim 33, wherein the filler is selected from the group

consisting of copper, rockwool, carbon, zirconium silicate, iron sulphide, alumina, rubber, diatoms, glass, aramid, acrylic and phenolic fibres.

38. The friction material according to Claim 37 that is by weight approximately 20% glass fibres, 10% ceramic fibres, 10% polyacrylonitrile fibres, 10% carbon, 10% coke, and 40% resol-based resin.

39. The friction material according to Claim 37 that is by weight approximately 20% glass fibres, 10% ceramic fibres, 10% polyacrylonitrile fibres, 10% copper, 10% rockwool, and 40% resol-based resin.

REMARKS

Claims 1-7, 9-18, 20, 22-25, and 27-39 are pending.

Claims 12-18, 20, 22-24, 27, and 29-32 are withdrawn from consideration.

Claims 1-7, 9-11, 25, 28, and 33-39 are rejected.

Claims 1 and 33 are independent claims.

Claims 1 and 33 are amended herein.

Attached hereto is a marked-up version of the claims captioned “CLAIMS MARKED TO SHOW CHANGES MADE” that details the changes made by the amendment.

Rejections Under 35 U.S.C. § 112(b)

Claims 1-7, 9-11, 25, 28, and 33-39 are rejected under 35 U.S.C. § 112 as indefinite for allegedly failing to particularly point out and distinctly claim the subject matter of the invention. The Office asserts that claims 1 and 33 are indefinite because they recite filler found to be “present” in approximately 0% to 40%, which implies that there is some percentage of filler present in the composite but the zero limit implies nothing can be present. All dependent claims are rejected as depending from a rejected base claim.